

1. A hitch having longitudinal, lateral, and transverse axes substantially mutually orthogonal to one another, the hitch comprising:

a first ball and pedestal, extending together in a first direction;

a second ball and pedestal, extending together in a second direction distinct from the first direction;

the first ball and pedestal and the second ball and pedestal comprising a substantially homogeneous monolith formed of a single material; and

a stem, extending away from the monolith in a third direction, distinct from both the first and second directions, to support, selectively, the first ball and pedestal and the second ball and pedestal in a respective deployed position thereof.

2. The hitch of claim 1, wherein the first direction and the second direction are substantially collinear and extending substantially opposite one another.

3. The hitch of claim 2, wherein the first direction and the second directions are substantially aligned with the transverse axis.

4. The hitch of claim 3, wherein the third direction is substantially aligned with the longitudinal axis.

5. The hitch of claim 4, wherein the stem is rotatably connected to the monolith.

6. The hitch of claim 4, wherein the stem is formed homogeneously with the monolith as a single piece of the single material.

7. The hitch of claim 6, wherein the stem is substantially cylindrical in shape.

8. The hitch of claim 7, further comprising a mount connected to rotatably support the stem.

9. The hitch of claim 8, further comprising a locking mechanism securing the stem to the mount at a plurality of rotational positions with respect thereto.

10. The hitch of claim 4, wherein the stem connects to the monolith by an interface selected from the group consisting of threading, welding, bolting, swaging, riveting, and pinning.

11. The hitch of claim 10, wherein the stem further comprises a lock securing the stem to the monolith.

12. The hitch of claim 4, wherein the stem is secured in fixed relation with respect to the pedestal such that the stem and the pedestal rotate together in rigid body motion.

13. The hitch of claim 12, wherein the stem comprises a trunnion and the hitch further comprises a receiver shaped to selectively receive the trunnion.

14. The hitch of claim 13, wherein the stem has a first portion, cooperatively shaped to engage a corresponding portion of the monolith, and a second portion, shaped distinctively from the first portion, to fit the receiver.

15. The hitch of claim 1, wherein the stem is connected to the monolith by an interface selected from the group consisting of threading, welding, bolting, and pinning.

16. The hitch of claim 1, wherein the first ball has diameter different from the diameter of the second ball.

17. An apparatus having longitudinal, lateral, and transverse axes substantially mutually orthogonal to one another for connecting a towed vehicle to a receiver on a towing vehicle, the apparatus comprising:

a first ball hitch extending in a first direction parallel to the transverse axis;

5 a second ball hitch extending in a second direction, collinear with, and opposite to, the first direction;

the first ball hitch and the second ball hitch formed together as a substantially homogeneous monolith of a single material; and

10 a stem, extending away from the monolith in a third direction, substantially parallel to the longitudinal axis, to support, selectively, the first and second ball hitches in respective deployed positions thereof.

18. An apparatus for mounting a hitch to a vehicle, the apparatus comprising:
a base having a supporting portion to connect to a vehicle;
a mount, having a proximal end and a distal end, the proximal end pivotably secured
to the base to support pitching of the mount with respect to the base between a stowed
position and a deployed position suitable for towing;
a first ball hitch extending in a first direction;
a second ball hitch extending in a second direction, distinct from the first direction;
the first ball hitch and the second ball hitch formed together as a homogeneous
monolith of a single material;
a stem rigidly extending in a third direction, distinct from both the first and second
directions, away from the monolith to selectively support the first ball hitch and the second
ball hitch in the respective deployed positions thereof; and
the stem, pivotably securing to the distal end of the mount to provide a rolling motion
of the monolith with respect to the mount.

19. The apparatus of claim 18, further comprising a first lock to selective maintain
the mount in the stowed position and the deployed position.

20. The apparatus of claim 19, further comprising a second lock to selectively
maintain the monolith at multiple degrees of rotation with respect to the mount.